

AMENDMENTS TO THE CLAIMS:

This listing of the claims will replace all prior versions, and listings, of the claims in this application.

Listing of Claims:

1. (Currently Amended) A computer implemented method for discovering data communication network configuration information, comprising:

invoking a network discovery function;

executing the invoked network discovery function for examining the network using individual ones of a plurality of network configuration discovery protocols that are executed sequentially in a hierarchical manner and organized so as to first execute a network configuration discovery protocol expected to provide most comprehensive network configuration information, followed by a network configuration discovery protocol expected to provide next most comprehensive network configuration information; and

while executing the invoked network discovery function, building a list containing discovered network configuration information.

2. (Original) A method as in claim 1, wherein the plurality of network configuration discovery protocols comprise a set of protocols selected from a Salutation protocol, a Service Location Protocol (SLP), a Lightweight Directory Access Protocol (LDAP), Domain Name Services (DNS) protocols, and a Dynamic Host Configuration Protocol (DHCP).

3. (Original) A method as in claim 2, wherein the DNS protocols comprise at least one of a DNS SRV Record protocol, a DNS MX Record protocol, a DNS Start of Authority Protocol, a DNS NS protocol and a DNS PTR protocol.

4. (Previously Presented) A method as in claim 1, where building the list operates so as to not

overwrite already discovered network configuration information.

5. (Previously Presented) A method as in claim 1, wherein the plurality of network configuration discovery protocols are executed in a sequence comprised of a Salutation protocol, a Service Location Protocol (SLP), a Lightweight Directory Access Protocol (LDAP), Domain Name Services (DNS) protocols, and a Dynamic Host Configuration Protocol (DHCP).

6. (Original) A method as in claim 1, wherein the list is stored as a location object in a persistent database.

7. (Previously Presented) A method as in claim 6, wherein a location object is imported into the persistent database, or exported from the persistent database.

8. (Previously Presented) A method as in claim 6, wherein a location object is exported from the persistent database, and made available to be imported into another persistent database.

9. (Original) A method as in claim 6, wherein an application program queries the persistent database for a location object, and uses the network configuration information stored in the location object while connected to a network from which the location object was derived.

10. (Currently Amended) A digital data storage media that is readable by a computer and that stores a software program that implements a process for discovering data communication network configuration information, the software program causing the computer to operate so as to invoke a network discovery function, to execute the invoked network discovery function to examine the network using individual ones of a plurality of network configuration discovery protocols that are executed sequentially ~~in a hierarchical manner and organized so as to first execute a network configuration discovery protocol expected to provide most comprehensive network configuration information, followed by a network configuration discovery protocol expected to provide next most comprehensive network configuration information~~ and, during the network examination, to build a list containing discovered network configuration information.

11. (Original) A digital data storage media as claimed in claim 10, wherein the plurality of network configuration discovery protocols comprise a set of protocols selected from a Salutation protocol, a Service Location Protocol (SLP), a Lightweight Directory Access Protocol (LDAP), Domain Name Services (DNS) protocols, and a Dynamic Host Configuration Protocol (DHCP).

12. (Original) A digital data storage media as claimed in claim 11, wherein the DNS protocols comprise at least one of a DNS SRV Record protocol, a DNS MX Record protocol, a DNS Start of Authority Protocol, a DNS NS protocol and a DNS PTR protocol.

13. (Original) A digital data storage media as claimed in claim 10, wherein the computer executes individual ones of the plurality of network configuration discovery protocols sequentially in a sequence comprised of a Salutation protocol, a Service Location Protocol (SLP), a Lightweight Directory Access Protocol (LDAP), Domain Name Services (DNS) protocols, and a Dynamic Host Configuration Protocol (DHCP).

14. (Previously Presented) A digital data storage media as claimed in claim 10, wherein the computer causes the list to be stored as a location object in a persistent database, wherein a location object is imported into the persistent database, or exported from the persistent database, and wherein a location object is exported from the persistent database and made available to be imported into another persistent database.

15. (Original) A digital data storage media as claimed in claim 14, wherein the computer operates to respond to an application program that queries the persistent database for a location object, to return the location object to the application for use by the application while connected to a network from which the location object was derived.

16. (Currently Amended) A digital data processing system comprising a data processor, a memory, and at least one network adapter for attaching the data processor to a data communication network, said memory storing a software program that controls said data processor for discovering data communication network configuration information by examining the network using individual ones of a plurality of network configuration discovery protocols

that are executed sequentially in a hierarchical manner and organized so as to first execute a network configuration discovery protocol expected to provide most comprehensive network configuration information, followed by a network configuration discovery protocol expected to provide next most comprehensive network configuration information and, during the network examination, for building a location object in a persistent database portion of said memory, said location object containing discovered network configuration information for use by an application while attached to the network.

17. (Original) A digital data processing system as claimed in claim 16, wherein the plurality of network configuration discovery protocols comprise a set of protocols selected from a Salutation protocol, a Service Location Protocol (SLP), a Lightweight Directory Access Protocol (LDAP), Domain Name Services (DNS) protocols, and a Dynamic Host Configuration Protocol (DHCP).

18. (Original) A digital data processing system as claimed in claim 17, wherein the DNS protocols comprise at least one of a DNS SRV Record protocol, a DNS MX Record protocol, a DNS Start of Authority Protocol, a DNS NS protocol and a DNS PTR protocol.

19. (Original) A digital data processing system as claimed in claim 16, wherein the data processor is controlled to execute individual ones of the plurality of network configuration discovery protocols sequentially in a sequence comprised of a Salutation protocol, a Service Location Protocol (SLP), a Lightweight Directory Access Protocol (LDAP), Domain Name Services (DNS) protocols, and a Dynamic Host Configuration Protocol (DHCP).

20. (Previously Presented) A digital data processing system as claimed in claim 16, wherein a location object is imported into the persistent database, or exported from the persistent database, and wherein a location object is exported from the persistent database and made available to be imported into another persistent database.

21. (New) A computer implemented method for discovering data communication network configuration information, comprising:

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invoking a network discovery function;

executing the invoked network discovery function for examining the network using a salutation discovery protocol;

executing the invoked network discovery function for examining the network using a SLP discovery protocol;

executing the invoked network discovery function for examining the network using a LDAP discovery protocol;

executing the invoked network discovery function for examining the network using a DNS discovery protocol;

executing the invoked network discovery function for examining the network using a DHCP discovery protocol; and

while executing the invoked network discovery function, building a list containing discovered network configuration information.